

ABSTRACT OF THE DISCLOSURE:

The present invention relates to artillery shell range, cannon fired satellite, missiles, and communication satellite launcher. Cannon shell range can be increased by decreasing the drag through making the flat base shape into inverted cone or by fastening a wood or lightweight plastic cone. Fastening a booster filled with gun powder to the base of the shell with a delay primer fuse that explodes in flight get the recoil push the trajectory higher in the air and faster in speed to reach a longer range. Adding multiple boosters in tandem causes successive explosions in flight that the successive recoils speeds up the shell in-flight and increases the range. Fastening a round thin steel smooth barrel to the base of the shell and stacking multiple flat sides or cone shaped boosters separated by felt or plastic separators with center holes filled with slow burning primer adds more blank-type recoil to enhance shell speed and range. Fastening a long round steel barrel to the base of the shell or trajectory body to fired from a cannon or from a silos can give the trajectory enough speed and enough fuel to become a long range missile with a bomb tip or can become a satellite body that can reach orbiting level. This starting or in-flight booster and boosters system can power a long range rocket, a satellite launcher, or a fast-travel vehicle that is starting at ground or fired from a high flying plane.